
Aconitum ouvardianum var. *acutiusculum* (Ranunculaceae), a New Combination from Yunnan, China

Yang Qiner and Luo Yan

Laboratory of Systematic and Evolutionary Botany, Institute of Botany, Chinese Academy of Sciences, 20 Nanxincun, Xiangshan, Beijing 100093, People's Republic of China.

qeyang@ns.ibcas.ac.cn; luoyan@ns.ibcas.ac.cn

ABSTRACT. Close examination of the type specimens of *Aconitum acutiusculum* and of *A. acutiusculum* var. *aureopilosum* has shown that their inflorescence rachis and pedicels are all yellowish spreading pubescent, and thus the two taxa show no essential difference from each other. They are merged herein. A new combination, *A. ouvardianum* var. *acutiusculum* (Fletcher & Lauener) Q. E. Yang & Y. Luo, is proposed, considering that *A. acutiusculum* is most similar to *A. ouvardianum* in having leaves 3-sect with ultimate lobules linear or lanceolate-linear, inflorescence rachis and pedicels yellowish spreading puberulent, and the upper sepal navicular-galeate, yet distinguishable by the acute tip of the lateral sepals; they are sympatric in geographical distribution, both occurring in Dêqên County, northwestern Yunnan.

Key words: *Aconitum*, China, Ranunculaceae, Yunnan.

Fletcher and Lauener (1950: 198) described *Aconitum acutiusculum* based on *Forrest 14696* from Baima Shan, Dêqên County, northwestern Yunnan, and stated that this species is clearly distinguished from all others in the genus by the acute tip of the lateral sepals, an otherwise unimportant feature in the classification of *Aconitum* L. because the lateral sepals in this genus are generally subrounded in outline. In the original Latin description, the upper part of the stem and the inflorescence are mentioned as densely and extremely minutely white crispy pubescent (Caulis . . . praesertim superne cum inflorescentia dense et minutissime albo-crispo-pubescent). Wang (1965) described a new variety, *A. acutiusculum* var. *aureopilosum*, from Yangtsa, Dêqên County, and stated that this variety is distinguished from the typical one by having the inflorescence yellowish spreading puberulent. When describing this new variety, he had no opportunity to examine the type specimens of *A. acutiusculum* and thus had to base his judgment on Fletcher and Lauener's description (Wang, pers. comm.). We have checked the holotype and isotype

of *A. acutiusculum* var. *aureopilosum* at PE and found that the inflorescence rachis and pedicels are indeed densely yellowish spreading puberulent. Pedicel pubescence is one of the most important diagnostic characters in the classification of the genus *Aconitum*.

Close examination of the type material of *Aconitum acutiusculum*, *Forrest 14696*, at BM, E, and K has shown that its inflorescence and pedicels, like those of *A. acutiusculum* var. *aureopilosum*, are densely yellowish spreading puberulent and that other important characters, such as the division of leaves and the shape of the upper sepal, are by no means different from those of *A. acutiusculum* var. *aureopilosum*. Their leaves are 3-sect with ultimate lobules linear or lanceolate-linear, and the upper sepal is navicular-galeate. As this variety shows no essential difference from *A. acutiusculum* in all the characters, they should be merged.

Aconitum ouvardianum Handel-Mazzetti (1931) is a common species in Dêqên, northwestern Yunnan. We have not seen its type, *Handel-Mazzetti 9702*, but fortunately this species is quite richly represented in the two major Chinese herbaria, PE and KUN, and its identity has long been determined with certainty. This species shows no essential difference from *A. acutiusculum* in all the characters except in the shape of the lateral sepals, with those in *A. acutiusculum* being acute at the apex while those in *A. ouvardianum* are subrounded. In our herbarium observations we found this feature is quite constant in these two entities, but this difference is too tenuous to allow treating them as two independent species. In fact, the type specimen of *A. acutiusculum* var. *aureopilosum* at PE was once referred to *A. ouvardianum* by Chen and Liu (1941). When Handel-Mazzetti (1931) described *A. ouvardianum*, he had noticed the similarity of *Forrest 14696* with his new species but also their differences, particularly in the shape of the lateral sepals. Thus, he did not refer this specimen to any species then known to him. Considering the consistent difference in the shape of the lateral sepals

yet the great similarity in other characters between *A. ouvrardianum* and *A. acutiusculum*, as well as their sympatric distribution, it seems best to reduce *A. acutiusculum* as a variety under *A. ouvrardianum*. The following new combination is thus proposed.

Aconitum ouvrardianum Handel-Mazzetti var. ***acutiusculum*** (Fletcher & Lauener) Q. E. Yang & Y. Luo, comb. nov. Basionym: *Aconitum acutiusculum* Fletcher & Lauener, Notes Roy. Bot. Gard. Edinburgh 20: 198. 1950. TYPE: China. Yunnan: Dêqên County, Baima Shan, heavy pasture on the margins of pine forests, 12,000 ft., Aug. 1917, *G. Forrest 14696* (holotype, E; isotypes, K, BM).

Aconitum acutiusculum var. *aureopilosum* W. T. Wang, Acta Phytotax. Sin., addit. 1: 85. 1965. Syn. nov. TYPE: China. Yunnan: Dêqên County, Yangtsa, Snow Range, Rusala, mountain grassy slope, 4100 m, Aug. 1937, *T. T. Yu 9671* (holotype, PE; isotype, PE).

Aconitum ouvrardianum var. *acutiusculum* is only known from Dêqên County, northwestern Yun-

nan, and seems quite uncommon. Although we had made several botanical expeditions to this area, we failed to find it. The typical variety *ouvrardianum*, however, is very common in this area, growing in alpine meadows or bushes at altitudes from 3000 to 4100 m.

Acknowledgments. We are grateful to the Keepers of BM, E, K, and PE for permission to examine specimens or for the loan of material. This work was supported by the National Natural Science Foundation of China (grant no. 30070057) and a Key Project of the Chinese Academy of Sciences (KSCXZ-SW-101A).

Literature Cited

- Chen, F. H. & Y. Liu. 1941. An enumeration of *Aconitum* collected by T. T. Yü from Yunnan. Bull. Fan Mem. Inst. Biol., Bot. ser. 11: 43–49.
- Fletcher, H. R. & L. A. Lauener. 1950. Notes on some Chinese species of *Aconitum* with an enumeration of the Chinese species represented in the Edinburgh Herbarium. Notes Roy. Bot. Gard. Edinburgh 20: 181–206.
- Handel-Mazzetti, H. 1931. *Aconitum*. Pp. 282–297 in *Symbolae Sinicae*, Vol. 7. Julius Springer, Vienna.
- Wang, W. T. 1965. Notulae de Ranunculaceis sinensibus II. Acta Phytotax. Sin., addit. 1: 49–103.